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New York Agricultural Experiment Station.

GENEVA, N. Y.

AGRICULTURAL EXPERIMENT STATION  
NEW MEXICO

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NEW OR NOTEWORTHY FRUITS. IV.

U. P. HEDRICK.



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 NEW YORK AGRICULTURAL EXPERIMENT STATION, GENEVA, N. Y.

The Bulletins published by the Station will be sent free to any farmer applying  
 for them.

\* Absent on leave. † Connected with Grape Culture Investigations.

## NEW OR NOTEWORTHY FRUITS. IV.

U. P. HEDRICK.

### INTRODUCTION.

Not infrequently one hears fruit growers deploring the multiplicity of varieties. Some thus set their faces against new fruits without rhyme or reason, but usually the man finding fault dismisses novelties with the curt and summary dictum "they don't pay." Happily, notwithstanding growing indifference, and some open opposition, to increasing the number of varieties, the divine curiosity that leads some men to invent leads others to breed fruits, so that, of the production of new sorts, like the making of books, there is no end. Do they pay? Should the influx of new varieties be encouraged or discouraged?

In the issue raised we believe that all interested in better fruits should welcome new varieties. Without them, broadly speaking, there can be no improvement. Old varieties have been changed little or not at all; nor can they be except, possibly, and very rarely, wholly depending on the whim of Nature, in such minor matters as a change of color in the skin of the apple, or loss of pubescence in the peach. No one of our fruits is yet perfect; and until perfection be attained, new varieties, better in one or more characters, be the improvement ever so small, are well worth their cost for the progress they make in the development of fruits.

If the multiplication of kinds helps to evolve more perfect fruits, what matter if many, even most, new fruits turn out to be unprofitable in dollars and cents? It must be so. Nature everywhere uses a lavish hand in improving life. The little time and expense needed to apply the test of fitness to a new fruit is a cheap price to pay for the development of better fruits. The purchase of a novelty which turns out badly is often a keen source of disappointment — the commonest cause of the hostile attitude toward all new varieties — but with the exit of the offending fruit, if new ventures be made,

wisdom in purchase growing with experience, the trial grounds on a fruit farm cannot but be a source of pleasure and profit.

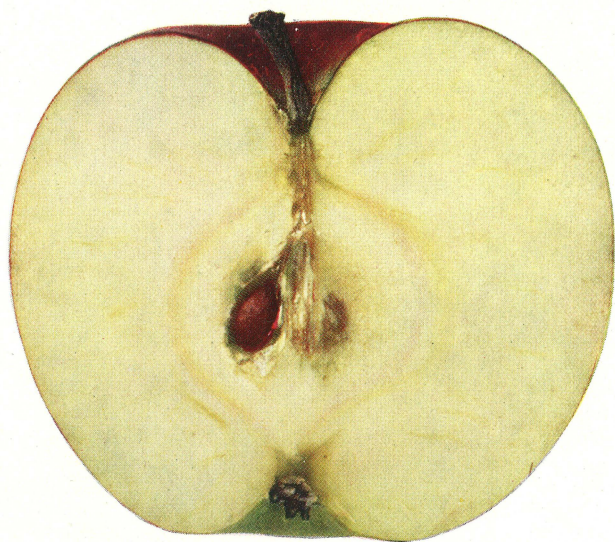
When fruit growers say new varieties "don't pay," they mean, of course, that there is no immediate profit. But often there is — to prove which numerous fruits introduced within the last few years might be named. It is not too much to say that, with one or two exceptions, all of the fruits grown in this climate have been improved during the past decade by the introduction of sorts that are earlier or later, higher in quality or handsomer, hardier or more productive, or that keep or ship better than the sorts whose places they are expected to fill. Now a new fruit that fulfills any of the conditions named better than the old varieties can hardly fail to be profitable in commercial plantations. No doubt many of these outlying varieties, sorts introduced to push forward fruit growing in one direction or another, have little or no commercial value, but just as a field can increase only at its borders, where weeds are most plentiful, so a fruit improves only by its frontier varieties, many of which may be little better than weeds.

Again, there is profit in growing many varieties for variety's sake. In the business of growing fruit a multitude of varieties is needed for a multitude of consumers. Dessert and culinary requirements are many and are not nearly met by the niggardly assortment which commercial fruit growers are now putting on the markets. Too close a specialization on Baldwins, Bartletts, Elbertas, Bradshaws, Montmorencies and Concords cannot but cut the total sales of New York fruits. A greater variety from which to choose would further the enjoyment and consumption of the fruits of the region by those who know them and would increase purchases among those who now buy little fruit or prefer an exotic product.

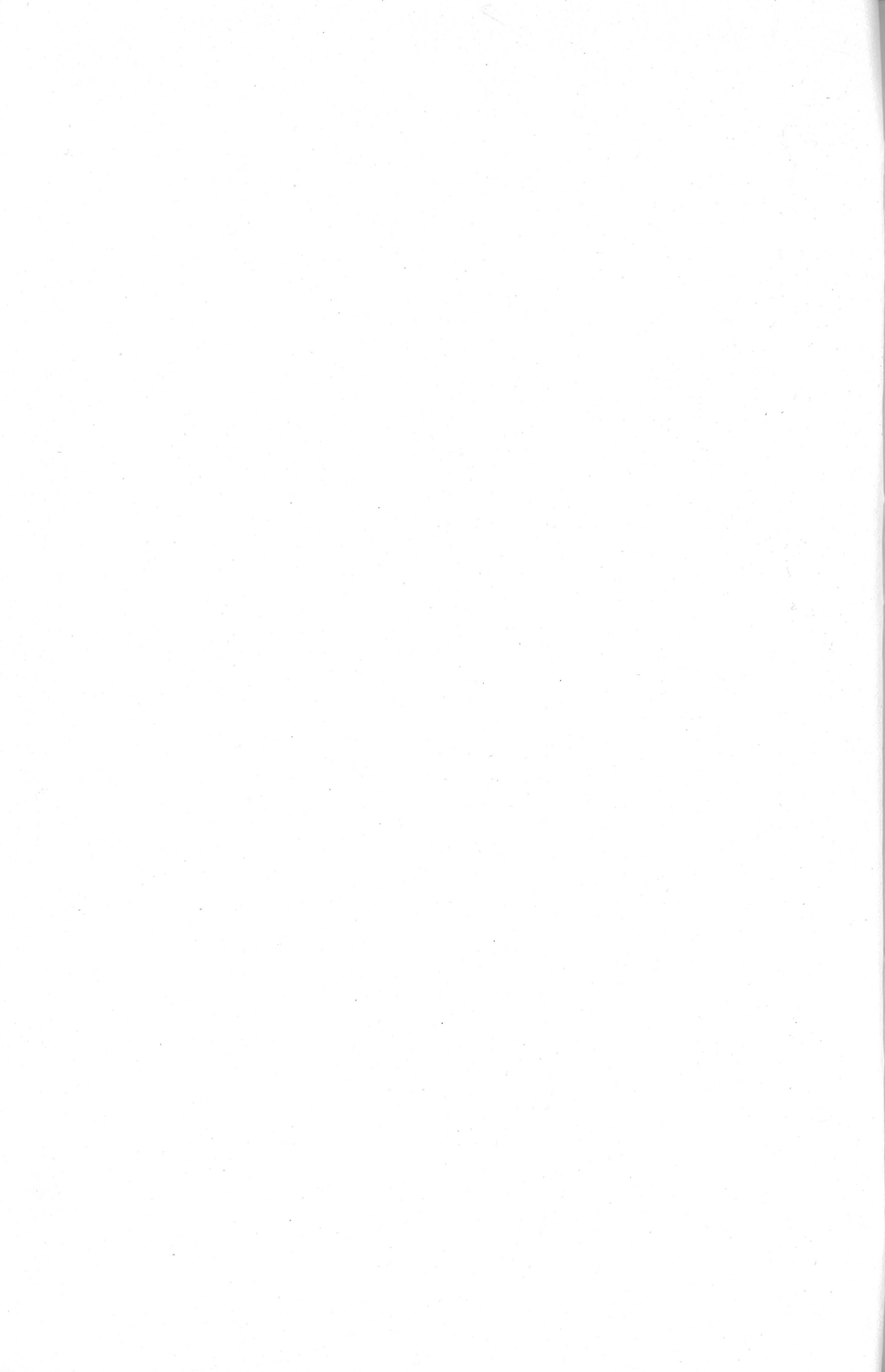
To be sure, a commercial fruit grower must make haste slowly in planting new varieties. He must demonstrate its value, or have it demonstrated for him, before setting out an orchard to a novelty. If his taste so inclines, a fruit grower should have a fruiticetum, or tree garden, in which to put promising new fruits on probation. While few fruit growers can afford to grow all of the new varieties which the catalogs illustrate by word and picture as "faultless," yet, again we say, it is good business, almost a duty, for orchardists to try some of the novelties offered.

But it is certain that neither time nor money suffice for the fruit





PERFECT



grower to determine for himself the merits of all of the new fruits. In New York the State Experiment Station attempts to do this for him, and from year to year a bulletin is published to show what fruits on the Station grounds, either novelties or old sorts now neglected, are sufficiently noteworthy to deserve the attention of fruit growers. This is the fourth such publication.

The number of fruits competing in the test with those we have included in the report for this year are as follows:

The named varieties include:

Apples, 421	Apricots, 48	Black raspberries, 23
Pears, 187	Nectarines, 34	Purple raspberries, 5
Quinces, 18	Gooseberries, 83	Yellow raspberries, 4
Plums, 322	Currants, 35	Dewberries, 9
Cherries, 109	Blackberries, 42	Grapes, 411
Peaches, 377	Red raspberries, 32	Strawberries, 44

Of distinct species there are on the Station grounds:

Pyrus, 50	Juglans, 3
Prunus, 38	Corylus, 3
Rubus, 61	Castanea, 2
Ribes, 25	Sambucus, 4
Vitis, 16	Fragaria, 3

### APPLE.

**Perfect** is an improvement over Baldwin. At least it is a better keeper, and this difference, other characters being equally good in the two varieties, makes Perfect the better apple. At this Station, for three seasons Perfect has been a month later in coming to edible condition and has remained in season a month to six weeks longer. Baldwin in some parts of New York is an early winter apple, as it is in southern and western states; Perfect, in such regions, becomes a finished product a month later and can be left for a turn in the market when Baldwin might have to be sacrificed.

The other differences between the two varieties, so far as we know them, are unimportant. The apples of the two sorts are of the same size; Perfect is not quite as bright in color, bearing somewhat the aspect of Winesap in both color and shape; the flesh of Baldwin is a little yellower, with the texture and flavor of the two sorts identical. The shape of the young trees is the same, but in

color of wood Perfect is darker and the lenticels are neither as large nor as conspicuous as on the wood of Baldwin. As to whether the new variety is as uniformly productive and vigorous as Baldwin remains to be seen; the behavior of the young trees indicates that there will be little difference between the two sorts in characters of growth and yield.

It is safe to say that Perfect is a seedling of Baldwin. It was found in a fence corner on a farm owned by W. F. Cobb, South Turner, Maine, some years ago. The long-keeping qualities of the fruit attracted the owner and the variety was sparingly propagated, after which the product was in demand for foreign shipment. Rice Brothers Nursery Company, Geneva, New York, purchased the entire stock in 1904, and are introducing the variety.

Tree vigorous, hardy, healthy, productive; branches strong, upright-spreading, forming a rather round, dense top. Fruit large, roundish-conic, somewhat ribbed, uniform; stem medium in length, thick; cavity acute, moderately deep, broad, often russeted, sometimes furrowed and occasionally lipped; calyx large, closed; basin medium in depth and width, rather abrupt, furrowed; skin moderately thick, smooth, dull, oily; color dull greenish-yellow, considerably overspread with dark, dull green which is almost solid on well-colored specimens but becomes mottled as the color fades, indistinctly splashed with carmine; flesh yellow, firm, somewhat coarse, crisp, moderately tender, juicy, subacid, good; season January to May.

## PEACH.

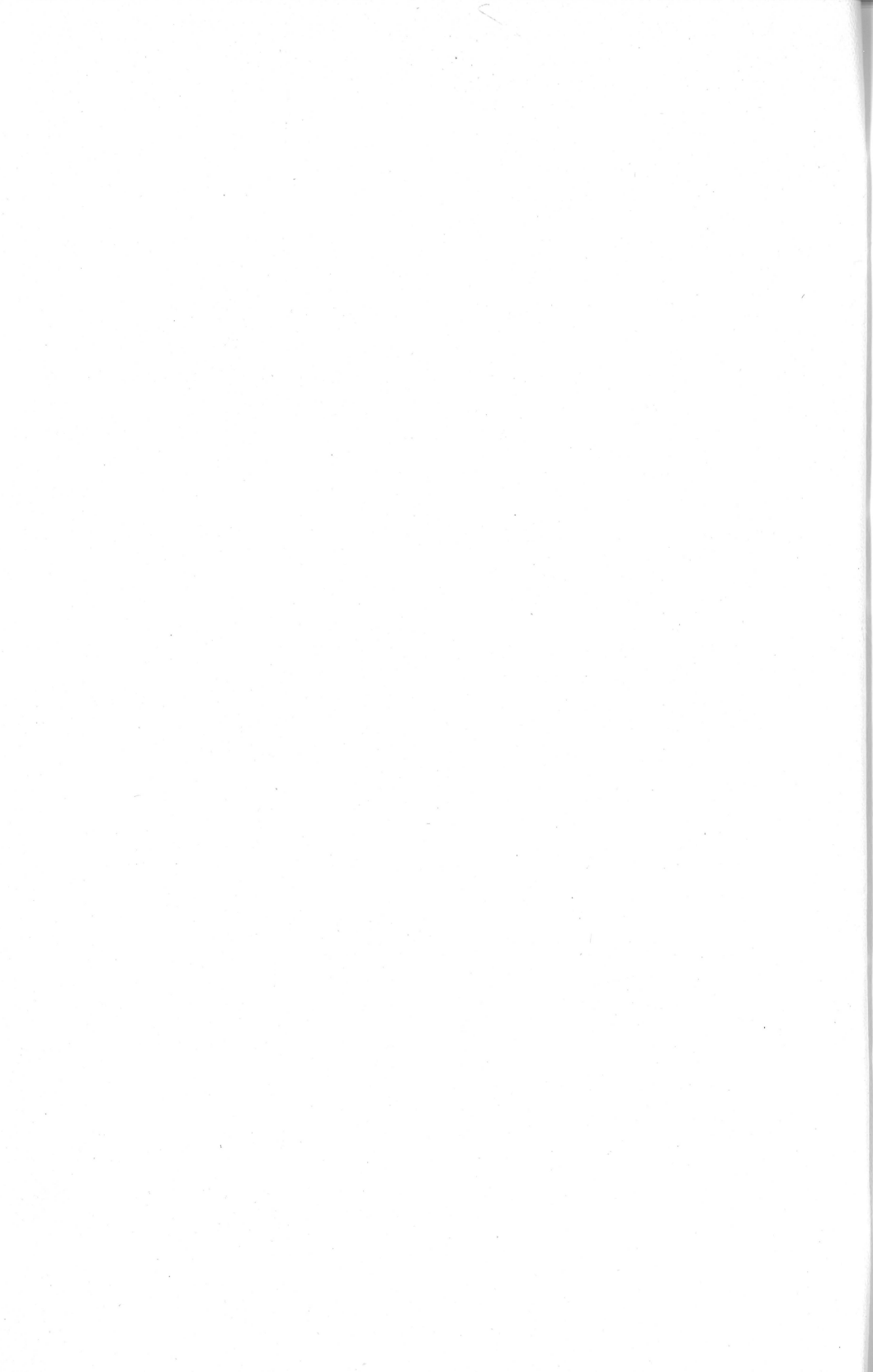
**Rochester.**—New York fruit growers have long desired an early yellow freestone peach with suitable tree-characters for a commercial plantation. In previous numbers of "New and Noteworthy Fruits" we have described two varieties, Edgemont and Niagara, as possible candidates for the place of "best early" in the seasonal procession of yellow, freestone peaches. We herewith present a third peach for this important place in the fruit list of the State. The latest competitor is Rochester, like both Edgemont and Niagara a member of the Crawford group and in several respects a marked improvement on the well-known Early Crawford.

Rochester, in season, regarding the crop as a whole, certainly precedes Early Crawford several days, ripening soon after the middle of August. The introducers say that it is two weeks earlier, a statement made possible by the fact that its season is very long, a few specimens ripening extremely early. The great length of season of this variety under some circumstances may be an asset, under others a liability, to the peach grower. As the color plate shows,





ROCHESTER





REINE HORTENSE





the peaches are large, yellow, with a handsome over-color of mottled red, more rotund than either of the two Crawfords or Elberta, making, all in all, a strikingly beautiful peach. The flesh, too, meets all the requirements of a good peach — thick and firm, marbled yellow, tinted with red at the pit, juicy, rich, sweet and in all respects fully up to the high standard of palatability found in peaches of the Crawford group. While the variety must be classed as a free-stone, yet there is a slight clinging which may disappear under some conditions and may be augmented under others. Rochester seems to be sufficiently productive for a good commercial fruit but it remains to be seen how generally it is adapted to soils and climates. Should its range of adaptability be great, Rochester, by virtue of earliness, good quality and handsome appearance, at once takes a high place in commercial peach growing in New York.

Rochester came from a seed planted about 1900 on a farm owned by a Mr. Wallen, near Rochester, New York. It was introduced by the Heberle Brothers Nurseries, Brighton, New York, in 1912.

Tree upright, slightly spreading, productive; branches stocky, reddish-brown, covered with ash-gray; leaves six inches long, one and five-eighths inches wide, oval to lanceolate acuminate, lighter green than Elberta, nearly smooth. Fruit matures late in August; rounder than Elberta but as large, slightly oblate, somewhat compressed; halves unequal; cavity deep, wide, flaring; suture shallow, deepening near the apex; apex roundish with a variable tip, usually mucronate; color lemon-yellow becoming orange-yellow, mottled with red, often merging into a flush of deep, dark red; splashes few; pubescence heavy; skin rather thick, tough, free when fully ripe; flesh yellow, tinged red at the pit, very juicy; very good in quality; stone nearly free.

## CHERRY.

Cherry growing has run to commercialism in the United States until now it is impossible to buy the fruit of more than three or four of the hundred or more Sour Cherries in the markets or of more than a half dozen sweet sorts out of a score of Sweet Cherries that might be furnished in any part of the country. Meanwhile the Dukes, hybrids between the sweet and the sour species, have practically disappeared from the markets and fruit lovers have lost one of the most refreshing and delectable of our dessert fruits. Fortunately most of the Duke cherries are hardy, vigorous and adapted to many soils, making it possible, in New York, at least, for all who have a garden or even a backyard or fence corner to have one or a few trees of these cherries. Of the many splendid cherries of this group, Reine Hortense is as good as any and better than most.

**Reine Hortense.**—Several qualities fit Reine Hortense admirably for home plantations. To begin with, the trees are only medium in size, almost dwarf, and take but little room or can be trained, as is often done in Europe, on walls or buildings. The cherries are excellent in quality, the flavor being a commingling of the refreshing acidity of the Sour Cherry and the richness of the Sweet. The fruits, too, are handsome—large, round, bright, glossy red, very uniform in shape, size and color. To add to the desirability of the variety for home planting, the trees are very attractive in leaf, flower and fruit, especially in fruit, the cherries hanging in twos and threes thickly scattered and never much clustered. The cherries hang long on the trees but are too soft for distant shipment.

Reine Hortense is an old French sort introduced and widely grown in America in the middle of the Nineteenth Century when amateur fruit growing was at its height and high quality took precedence over all other characters.

Tree of medium size, upright-spreading, productive; branches smooth, dark reddish-brown with a few large lenticels; leaves large, oval to obovate, thin; blooming season short, intermediate in time; flowers large, one and one-fourth inches across, borne usually in threes. Fruit matures in mid-season; nearly one inch in diameter, oblong-conic to obtuse-conic, compressed; cavity somewhat shallow, often lipped; color amber-red; stem tortuous, slender, long, adherent to the pulp; flesh pale yellow, with colorless juice, tender and melting, sprightly subacid; of very good quality; stone free, rather large, oblong to oval.

## GRAPE.

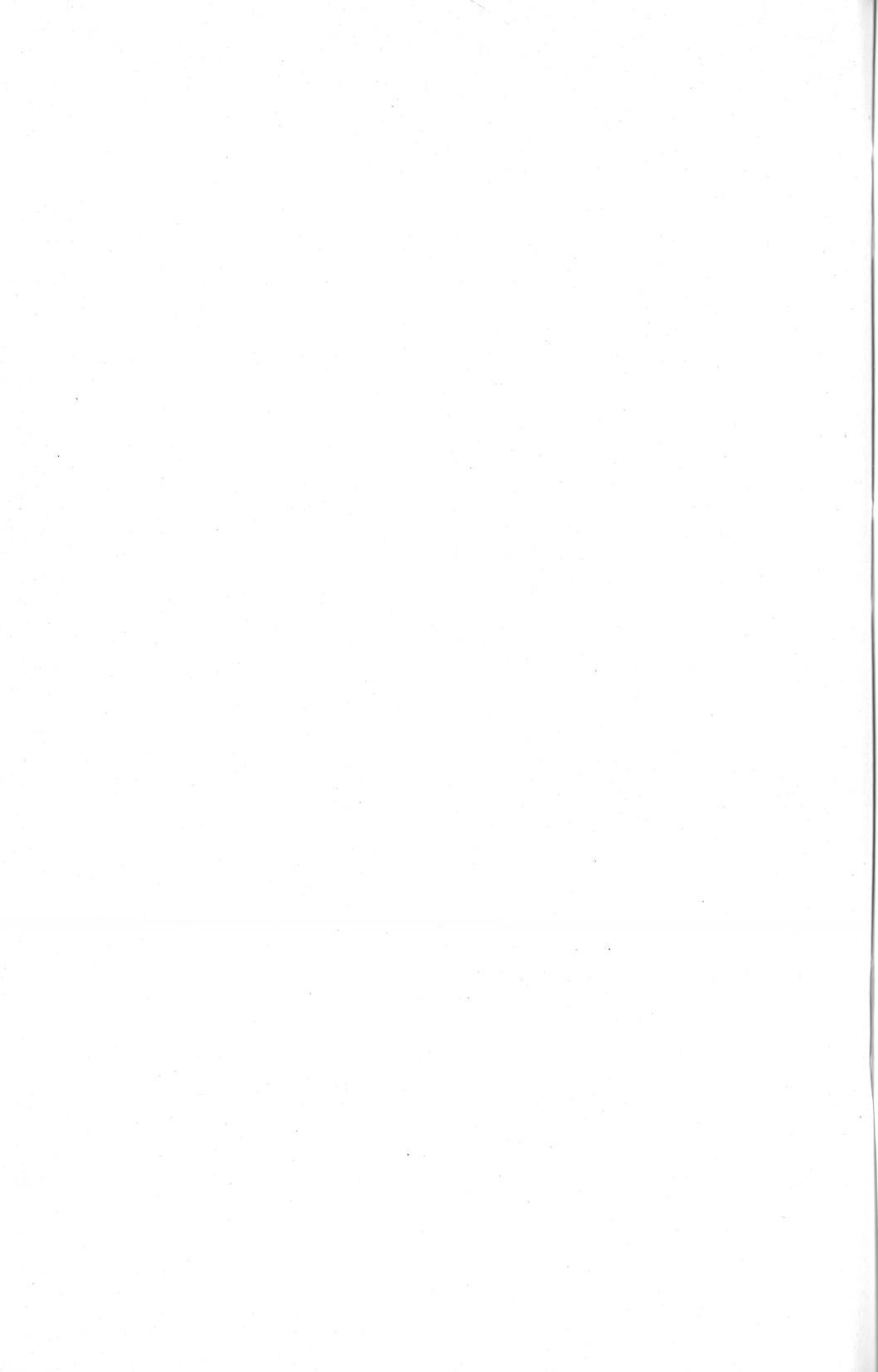
Niagara has long been the leading green grape in New York, a position it attained, in large part at least, through having been well advertised. It is deservedly popular, however, but there are other green grapes competing with it, now quite eclipsed by Niagara's reputation, that should receive more general recognition by both commercial and amateur grape growers. One of these is Empire State, old, and once well known, but now quite too generally neglected.

**Empire State**, compared with Niagara, is as vigorous, as free from insects and fungi, as productive, and is but little, if any, less hardy, though both sorts fall short in this respect. In two characters, Empire State quite surpasses Niagara. It is far better in quality and may be kept longer. In quality Empire State ranks among the best of the native grapes, approaching in flavor any of the good Old World sorts, its delicate wild taste suggesting the muskiness





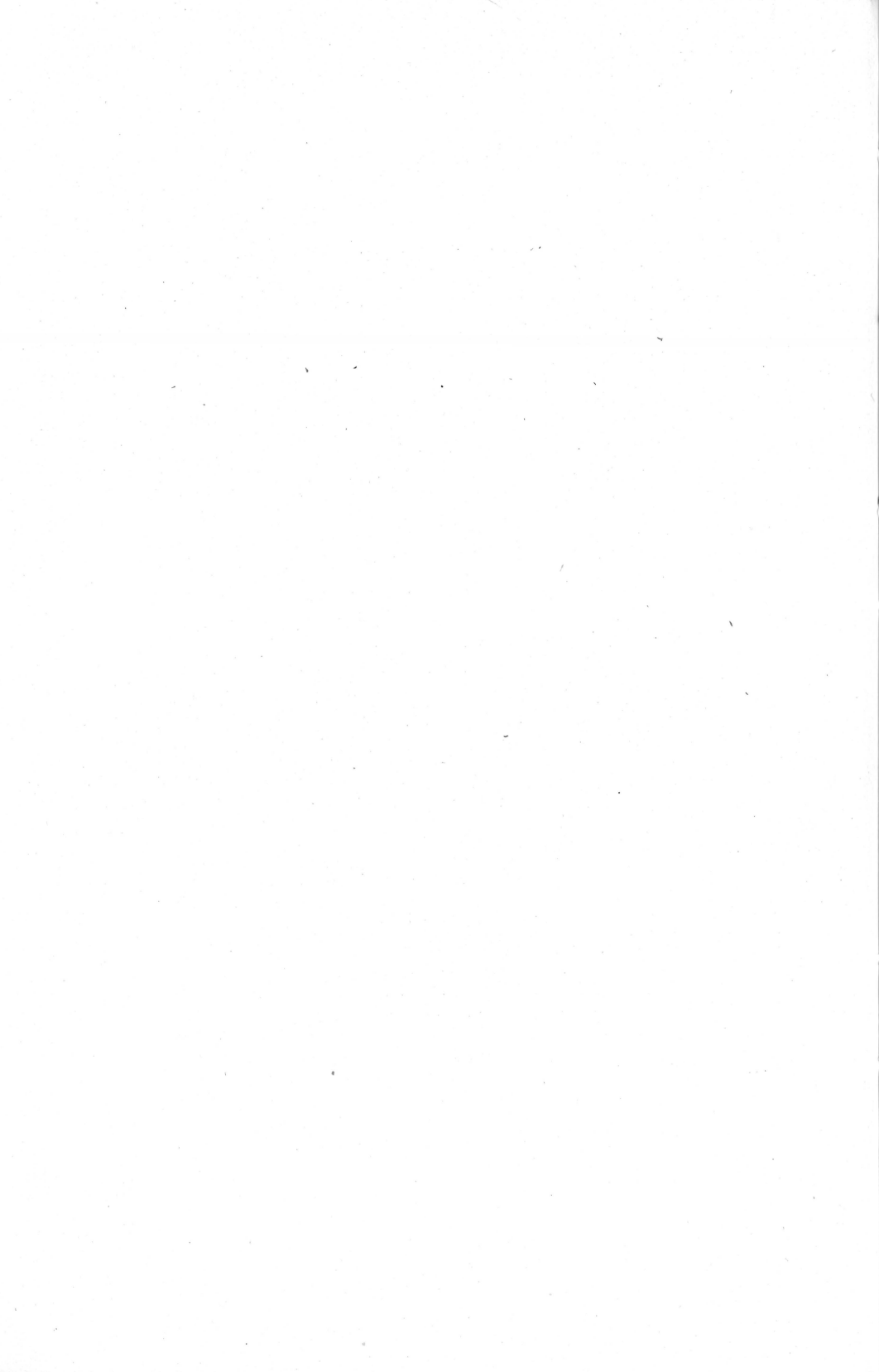
EMPIRE STATE







HERBERT



of the European Muscats rather than the foxiness of native grapes. The variety ripens a little later than Niagara and keeps much longer, retaining its fine flavor until the last. In one important respect Empire State cannot compete with Niagara — the grapes are not nearly as handsome in either bunch or berry.

Its several excellencies, as compared with grapes of its kind, should give it a welcome place in the gardens and vineyards of New York, but there is an added reason for the cultivation of Empire State. It is distinctly different in its horticultural and botanical characters, being a combination of the wild *Riparia* and *Labrusca* of American woods and the *Vinifera* of the Old World and thus adds a new and brisk flavor to our dessert grapes.

The variety is one of several remarkable sorts from James H. Ricketts, Newburgh, New York, having fruited first in 1879.

Vine usually vigorous, in some locations tender, productive, canes short, few, slender, brownish, not flattened at the slightly enlarged nodes; leaves rather small; upper surface light green, glossy; lower surface tinged with bronze, heavily pubescent; flowers fertile, open late. Fruit somewhat variable in season of ripening, averaging a few days later than Niagara; ships and keeps well; clusters medium to large, long, slender, cylindrical to tapering, frequently single-shouldered. Berries variable in size, roundish, pale yellowish-green, covered with gray bloom, persistent; skin rather thick, adherent but slightly to the pulp; flesh pale yellowish-green, translucent, very juicy, tender, sweet next the skin but somewhat acid at the center, pleasant flavored; good to very good; seeds adhering slightly to the pulp, small.

## RASPBERRY.

**Herbert.**— It is twenty-five years since the Herbert red raspberry came to light and it has been grown more or less in New York for ten years, yet in this time it has not attained the popularity it deserves. Herbert, as comparisons to be made later will show, is one of the best berries of its kind, yet many large berry growers have not tried it and few of the nurserymen list it. In a collection of thirty-two sorts, Herbert is, after June and Marldon, the most valuable red raspberry on the Station grounds.

The preeminent merits of Herbert are: Great vigor and hardiness, being rather hardier than the well-known Cuthbert; comparatively few suckers; and, most valuable of all, tremendous productivity, being nearly twice as productive as the old standard, Cuthbert. The season is about that of Cuthbert but usually continues a few days longer. The berries are somewhat similar to Cuthbert but are more sprightly in flavor, a little larger, rounder and, unfortu-

nately, a little softer. The fact that the fruits will not hold their shape quite as well as some other sorts is the chief and about the only point of inferiority in the variety. The berries, however, are firm enough to carry to nearby market with ordinary care.

Herbert is a chance seedling found in the garden of R. B. Whyte, of Ottawa, Canada, about 1891. The variety was introduced in 1904 by The Renfrew Nurseries, of Renfrew, Canada.

Plants vigorous but not so tall as Cuthbert, upright except when borne down by the weight of fruit, hardy, healthy, very productive; canes intermediate in size and smoothness, numerous, dull red; prickles medium in length and number. Leaves oblong-oval, dark green, rugose. Flowers large; petals rather large, oval, tapering to short, abrupt claws. Fruit matures late, about with Cuthbert; large to very large, broadly ovate, with medium to large, coherent drupes, dark red, juicy, somewhat soft under unfavorable conditions, pleasant flavored, sprightly; good in quality.



